



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/523,990	03/13/2000	Mou-Shiung Lin	085027-0026	6138
89518	7590	06/23/2010	EXAMINER	
McDermott Will & Emery LLP 11682 El Camino Real Suite 400 San Diego, CA 92130		WALSH, DANIEL I		
		ART UNIT		PAPER NUMBER
			2887	
			NOTIFICATION DATE	DELIVERY MODE
			06/23/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

SIP_Docket@mwe.com

Office Action Summary	Application No.	Applicant(s)	
	09/523,990	LIN ET AL.	
	Examiner	Art Unit	
	DANIEL WALSH	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 4-6-10.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 44,48,49 and 60-68 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 44,48,49 and 60-68 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 44, 48, 49, and 60-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikita et al. (US 6,476,499) in view of Shimizu (JP405123237A).

Hikita et al. teaches (FIG. 5, 16A+) a circuit component comprising a substrate, a semiconductor chip over a top surface of the substrate wherein the chip has a front surface facing the top surface of the substrate and a back surface opposite to the front surface and wherein said chip comprises multiple pads at the front surface; an identity of product directly on said back surface of the chip; multiple metal bumps between said multiple pads of said chip and said top surface of said substrate as bumps are used to bond the chips (1,2) to each other via electrodes

(13,23) because it would have been obvious to use metal bumps/solder for conductivity, as is conventional in the art, such as for use between 13,23 of a first chip and a second chip/substrate. The barcode is indicative of the model and production lot number, and therefore is interpreted as identity of the product information. Hikita et al. teaches the barcodes and information notations may be achieved by a printing process (col 17, lines 41+).

Hikita et al. is silent to an optically transparent layer directly over said identity of product wherein said identity of product is visible through said optically transparent layer.

Shimizu teaches printing a barcode and then either printing or superposing a transparent resin member on the barcode for wear resistance, scratch resistance, or water resistance. It is understood that the barcode is readable, as it provides identification information. Further, the mere claiming that the barcode is visible does not appear to effect the structure of the device, as the Examiner believes that information such as chip markings are capable of being read, as in indicia. Further, as the coating is recited as a resin, it is understood to be resistant to damaging, and therefore would provide the expected result of protecting removal of the barcode/information, or altering of the information, thus providing information security. The mold package of Hikita et al. can cover the barcode but once removed it does not provide the expected results of information security, as a resin coating on the information/barcode would.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hikita et al. with those of Shimizu.

One would have been motivated to do this in order to protect/cover the information while still permitting it to be visible.

Re claim 48, Hikita et al. teaches a mold package (col 17, lines 55+). Though silent to an underfill between the front surface and a top surface of said substrate that encloses the metal bumps, the Examiner notes that is it well known and conventional in the art to underfill/encapsulate such packages (underfill material enclosing bumps and parts of the circuit/package) in order to seal/enclose/protect/strengthen elements of the device.

Re claim 49, though silent to balls on a bottom surface of said substrate, the Examiner notes that balls on a surface are an obvious expedient, well within the ordinary skill in the art, to effect connection between elements (pads/points of contact). The Examiner notes that balls/bumps are conventional to attach substrate together, as in flip chip/stacked chip arrangements, and therefore an obvious expedient to effect connection.

Re claims 61-68, the limitations have been discussed above. The Examiner notes that the barcode is taught as providing informational notations such as production lot number, model number, etc. Though silent to the identity of the manufacturer, the Examiner notes that the type of information contained in the printed matter is an obvious matter of design variation and is not functionally related to the substrate that it is on, and as such, is not patentable (see in re Gulack/Ngai). Merely specifying a type of information to be included is a matter of design variation, as merely conveying relevant desired information. Further, as such information claimed are just types of information notations as claimed, one would have been obvious to include such different notations to provide information to the user, for example; such relevant product information including information generally related to products such as product information, name, manufacturer, model number, etc., as known in the art.

2. Claims 48, 49, 60-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikita et al./Shimizu, as discussed above, in view of Flip Chip, as discussed in the previous Office Action.

The teachings of Hikita et al./Shimizu have been discussed above.

Hikita et al. /Shimizu are silent to the underfill, balls on the bottom of the substrate, and solder bumps.

Flip Chip teaches such limitations (see lone drawing).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hikita et al. /Shimizu with those of Flip Chip.

One would have been motivated to do this in order to use known techniques to produce predictable results, such as underfill/protection/covering of elements and connectivity (conductivity)between elements, as bumps/balls of metal/solder are known in the art to effect connectivity between elements, and underfills are known to provide protection/covering.

Re claims 61-68, the limitations have been discussed above. The Examiner notes that the barcode is taught as providing informational notations such as production lot number, model number, etc. Though silent to the identity of the manufacturer, the Examiner notes that the type of information contained in the printed matter is an obvious matter of design variation and is not functionally related to the substrate that it is on, and accordingly is not patentable (see in re Gulack/Ngai). Merely specifying an additional type of printed information to be included for information purposes is a matter of design variation, to convey relevant/additional/desired information. Further, the Examiner notes that it conventional in the art to provide additional information related to products such to provide the product information as known in the art.

It is understood that the barcode is visible/readable through the coating to permit use.

3. Claims 44, 48, 49, 60, 62-64, and 66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyozo et al. (US 5,894,172) in view of Shimizu, as discussed above, and Flip Chip, as discussed above.

Hyozo et al. teaches a chip with a front and back surface where the front surface is a bottom and the back surface is a top, and identity information (of product) directly on said back surface of the chip (FIG. 8). The Examiner notes that the type of information selected is a matter of design variation, not functionally related to the substrate and therefore is not patentable. The information 8 is interpreted as machine readable, motivated for increased efficiency and accuracy (machine reading). FIG. 32 teaches a printed barcode, seen as an obvious expedient for machine readable information.

Hyozo et al. is silent to the chip being a flip-chip/the structure of pads, bumps, solder, substrate, and underfill as claimed.

Flip Chip teaches such limitations, as discussed above.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hyozo et al. with those of Flip Chip.

One would have been motivated to do this to provide identification information on the chip (directly on the chip) that can be printed on the surface of the chip in various location, since no electronics circuit devices are connected on that surface of the chip. Applying such identification information to a flip-chip structure would enable known techniques to be provided on similar devices in a same way to produce predictable results, namely direct application of identification information.

Hyozo et al./Flip Chip are silent to a transparent encapsulant/coating the printed barcode.

Shimizu teaches such limitations (as discussed above) where a barcode is printed and a resin protective coating is applied thereon for protection.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hyozo et al./Flip Chip with those of Shimizu in order to apply the teachings of transparent protective coatings over identification information.

One would have been motivated to do this to protect the information while still permitting it to be read (transparent). As discussed above, including additional product related information (printed matter) is an obvious matter of design variation to provide additional product related information.

4. Claims 44, 48, 49, and 60-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikita et al. (US 6,476,499) in view of Hiromasa (JP362169448A), as cited in a previous Office Action.

Hikita et al. teaches (FIG. 5, 16A+) a circuit component comprising a substrate, a semiconductor chip over a top surface of the substrate wherein the chip has a front surface facing the top surface of the substrate and a back surface opposite to the front surface and wherein said chip comprises multiple pads at the front surface; an identity of product directly on said back surface of the chip; multiple metal bumps between said multiple pads of said chip and said top surface of said substrate as bumps are used to bond the chips (1,2) to each other via electrodes (13,23) because it would have been obvious to use metal bumps/solder for conductivity, as is conventional in the art, such as for use between 13,23 of a first chip and a second chip/substrate.

Hikita et al. is silent to an optically transparent layer vertically over said identity of product wherein said identity of product is visible through said optically transparent layer.

Hiromasa teaches a transparent resin through which identification information can be read (FIG. 1, 2, 4, 5), broadly interpreted as an identity of a product. Though silent to a barcode being visible, it would have been obvious to one of ordinary skill in the art to use a barcode to provide machine readable indicia for reliability/accuracy. There mere claiming that the barcode is visible does not appear to effect the structure of the device, as the Examiner believes that information such as chip markings are capable of being read, as in indicia.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hikita et al. with those of Hiromasa in order to apply the teachings of transparent protective coatings over identification information

One would have been motivated to do this in order to protect/cover the information while still permitting it to be visible. Though silent, the Examiner notes that it is well known in the art that resin and similar protective coatings can be applied/superimposed on printed barcodes, such as those of Hikita et al. Though Hikita et al. teaches reviewing the information/barcode on the chip by removing of a mold package, removal of the mold package exposes the barcode/information. Therefore it would have been obvious to have a protective coating to protect the barcode/information from damage, and also to protect the information from being altered/damaged/tampered with through the use of a resin protective coating. Accordingly, applying the general concept of transparent resin over ID information (from Hiromasa) to a specific ID information (that of Hikita et al.) would have been obvious to produce expected results, as the application of the resin/coating is believed to be applicable to surfaces that desire

protection, and is not limited to only on chip packages, can be applied to chips themselves to produce expected results.

Re claim 48, Hikita et al. teaches a mold package (col 17, lines 55+). Though silent to an underfill between the front surface and a top surface of said substrate that encloses the metal bumps and contacts the front and top surface, the Examiner notes that is it well known and conventional in the art to underfill/encapsulate such packages (underfill material enclosing bumps and parts of the circuit/package) in order to seal/enclose/protect/strengthen elements of the device.

Re claim 49, though silent to balls on a bottom surface of said substrate, the Examiner notes that balls on a surface are an obvious expedient, well within the ordinary skill in the art, to effect connection between elements (pads/points of contact). The Examiner notes that balls/bumps are conventional to attach substrate together, as in flip chip/stacked chip arrangements, and therefore an obvious expedient to effect connection.

Re claims 61-68, the limitations have been discussed above. The Examiner notes that the barcode is taught as providing informational notations such as production lot number, model number, etc. Though silent to the identity of the manufacturer, the Examiner notes that the type of information contained in the printed matter is an obvious matter of design variation and is not functionally related to the substrate that it is on, and as such, is not patentable (see in re Gulack/Ngai). Merely specifying a type of information to be included is a matter of design variation, as merely conveying relevant desired information. Further, as such information claimed are just types of information notations as claimed, one would have been obvious to include such different notations to provide information to the user, for example; such relevant

product information including information generally related to products such as product information, name, manufacturer, model number, etc., as known in the art. The obviousness of printed matter for identification purposes has been discussed above.

5. Claims 48, 49, 60-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikita et al./Hiromasa, as discussed above, in view of Flip Chip, as discussed in the previous Office Action.

The teachings of Hikita et al./Hiromasa have been discussed above.

Hikita et al. /Hiromasa are silent to the underfill, balls on the bottom of the substrate, and solder bumps as claimed.

Flip Chip teaches such limitations (see lone drawing).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hikita et al. /Hiromasa with those of Flip Chip.

One would have been motivated to do this in order to use known techniques to produce predictable results, such as underfill/protection/covering of elements and connectivity (conductivity)between elements, as bumps/balls of metal/solder are known in the art to effect connectivity between elements, and underfills are known to provide protection/covering.

Re claims 61-68, the limitations have been discussed above. The Examiner notes that the barcode is taught as providing informational notations such as production lot number, model number, etc. Though silent to the identity of the manufacturer, the Examiner notes that the type of information contained in the printed matter is an obvious matter of design variation and is not functionally related to the substrate that it is on, and as such, is not patentable (see in re Gulack/Ngai). Merely specifying a type of information to be included is a matter of design

variation, as merely conveying relevant desired information (additional). Further, as such information claimed are just types of information notations as claimed, one would have been obvious to include such different notations to provide additional information to the user, for example; such relevant product information including information generally related to products such as product information, name, manufacturer, model number, etc., as known in the art. It is understood that the barcode is visible/readable through the coating to permit use, and the obviousness of different printed matter for informational purposes has been discussed above.

The Examiner notes that coming into contact with the front and top surface is an obvious expedient to seal/secure the chip.

6. Claims 44, 48, 49, 60, 62-64, and 66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyozo et al. (US 5,894,172) in view of Hiromasa, as discussed above, and Flip Chip, as discussed above.

Hyozo et al. teaches a chip with a front and back surface where the front surface is a bottom and the back surface is a top, and identity information (of product) vertically on said back surface of the chip (FIG. 8). The Examiner notes that the type of information selected is a matter of design variation, not functionally related to the substrate and therefore is not patentable. The information 8 is interpreted as machine readable, motivated for increased efficiency and accuracy (machine reading).

Hyozo et al. is silent to the chip being a flip-chip/the structure of pads, bumps, solder, substrate, and underfill as claimed.

Flip Chip teaches such limitations, as discussed above.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hyozo et al. with those of Flip Chip.

One would have been motivated to do this to provide identification information on the chip (directly on the chip) that can be printed on the surface of the chip in various location, since no electronics circuit devices are connected on that surface of the chip. Applying such identification information to a flip-chip structure would enable known techniques to be provided on similar devices in a same way to produce predictable results, namely direct application of identification information. Underfill contacting the front and top is an obvious expedient for protection/securing of the chip.

Hyozo et al./Flip Chip are silent to a transparent encapsulant/coating.

Hiromasa teaches such limitations (as discussed above).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hyozo et al./Flip Chip with those of Hiromasa in order to apply the teachings of transparent protective coatings over identification information.

One would have been motivated to do this to protect the information while still permitting it to be read (transparent).

Re claims 62-64 and 66-68, the limitations have been discussed above. The Examiner notes that the barcode is taught as providing informational notations such as production lot number, model number, etc. Though silent to the identity of the manufacturer, the Examiner notes that the type of information contained in the printed matter is an obvious matter of design variation and is not functionally related to the substrate that it is on, and as such, is not patentable (see *in re Gulack/Ngai*). Merely specifying a type of information to be included is a

matter of design variation, as merely conveying relevant desired information (additional). Further, as such information claimed are just types of information notations as claimed, one would have been obvious to include such different notations to provide information to the user (additional), for example; such relevant product information including information generally related to products such as product information, name, manufacturer, model number, etc., as known in the art.

Though silent to a barcode being visible, it would have been obvious to one of ordinary skill in the art to use a barcode to provide machine readable indicia for reliability/accuracy. There mere claiming that the barcode is visible does not appear to effect the structure of the device, as the Examiner believes that information such as chip markings are capable of being read, as in indicia.

Underfill contacting the front and top is an obvious expedient for protecting/securing of the chip.

7. Claims 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikita et al./ Hiromasa, as discussed above, in view of Shimizu (JP405123237).

The teachings of Hikita et al./Hiromasa have been discussed above.

Hikita et al./Hiromasa is silent to a barcode visible through resin.

Shimizu teaches such limitations (CONSTITUTION).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hikita et al./Hiromasa with those of Shimizu.

One would have been motivated to do this to protect the barcode while still being readable/visible. The Examiner notes that Shimizu is relied upon for the general teaching of barcodes/id information visible through resins.

Underfill contacting the front and top is an obvious expedient for protecting/securing of the chip.

8. Claims 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikita et al./ Hiromasa/Flip Chip, as discussed above, in view of Shimizu (JP405123237).

The teachings of Hikita et al./Hiromasa have been discussed above.

Hikita et al./Hiromasa/Flip Chip is silent to a barcode visible through resin.

Shimizu teaches such limitations (CONSTITUTION).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hikita et al./Hiromasa/Flip Chip with those of Shimizu.

One would have been motivated to do this to protect the barcode while still being readable/visible.

The Examiner notes that Shimizu is relied upon for the general teaching of barcodes/id information visible through resins.

Underfill contacting the front and top is an obvious expedient for protecting/securing of the chip.

9. Claims 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyozo et al./ Hiromasa/Flip Chip, as discussed above, in view of Shimizu (JP405123237).

The teachings of Hyozo et al./Hiromasa/Flip Chip has been discussed above.

Hyozo et al./Hiromasa/Flip Chip is silent to a barcode visible through resin.

Shimizu teaches such limitations (CONSTITUTION).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hyozo et al./Hiromasa/Flip Chip with those of Shimizu.

One would have been motivated to do this to protect the barcode while still being readable/visible.

The Examiner notes that Shimizu is relied upon for the general teaching of barcodes/id information visible through resins.

Underfill contacting the front and top is an obvious expedient for protecting/securing of the chip.

Response to Arguments

10. Applicant's arguments with respect to the claims have been considered but are not persuasive.

11. In response to the Applicants argument that there is no motivation to have a transparent layer to be applied to Fikias devices, the Examiner respectfully disagrees. As the barcode/information of Hikita is exposed, via opening of the mold, the information is exposed. It is maintained by the Examiner that protecting identification information of a chip, using a transparent layer, is an obvious expedient against damage/alteration. The mere fact that Hikita's information is exposed is ample motivation to protect it from damage/alteration, as it is being inspected. The Examiner notes that though it is not visible unless the mold is removed, such a structure does not prevent a transparent protective coating to be applied, for expected results.

12. IN response to the Applicants argument that Shimizu is non-analogous art, the Examiner notes that Shimizu is primarily relied upon to support that resins can be transparent and information view through them. Accordingly, such a teaching provides support/evidence to reading information through a resin, regardless of its application.

13. The Examiner maintains that applying a transparent coating on information of a chip (not on the package, but on the chip itself), such as a coating on the chip information of Hikita, is an obvious expedient for obvious results.

IN response to the Applicants argument that Hiromasa's chip is not visible in the final product, the Examiner notes that the primary references (Hikita for example) teach the barcode being visible when the mold is opened for inspection. Therefore, the Examiner notes that he is applying the transparent resin of Hiromasa onto the barcode of Hikita (not on the chip package but on the chip) to provide the expected results of a resin to transparently protect/secure information there-through. The Examiner is not relying upon Hiromasa's teachings for a resin over a package, but is instead applying Hiromasa's teachings of resin coated identification information, to the identification information provided on the chip of Hikita et al. to provide expected results of security/protection.

Additional Remarks

In order to attempt to expedite prosecution, the Examiner notes that the prior art primary references relied upon teach printed information formed directly on a chip/substrate, but do not explicitly teach to a transparent protective coating thereon. The Examiner notes that protective coatings/resins are known in the art to be applied to printed information for security and to

reduce wear/damage. References such as Shimizu and Hiromasa reinforce the general concept of resins/transparent coatings being applied to printed information for such purposes. The Examiner notes that the protective coatings themselves are believed to be applicable to printed material, for expected results. As an example, as Hikita et al. teaches a printed barcode/information on a chip surface, but not a transparent coating on the printed information, the Examiner believes that the transparent coatings of Shimizu or Hiromasa, which are generally disclosed as upon printed information, can be applied to the printed information of Hikita et al. for expected results, without requiring the packaging or other elements that maybe disclosed in the Shimizu or Hiromasa references. The general transparent resin/protective coatings are not believed to require other structural elements in order for the coating to be applied to a printed area to function.

However, it appears the Applicant is interpreting the Examiners rejection (combination of references) would result in a structure that includes all structural elements of a first reference combined with all structural elements discloses in the second reference. However, the Examiner notes that he is not relying upon every structural reference in a secondary reference, but the secondary reference is relied upon for teachings that are absent in the primary reference and is believed to be generally applicable to printed matter itself (transparent resin/protective coatings). As mentioned, such coatings applied to printed matter are known in the art, and the Examiner is relying upon the secondary references for teachings of this type of coating, which is believed itself to be applicable to the printer matter of the primary references, without requiring all the structural details of the secondary reference which are not being relied upon. Therefore, it is unclear to the Examiner why using Hiromasa as a secondary reference would require the package

material 2, for example. The Examiner notes that the secondary reference is relied upon for teachings not disclosed by the primary reference, and that these teachings (protective coating applied over a printer material/barcode) are believed to be able to be applied to a primary reference disclosing printer matter, without requiring additional structure such as package material 2, in the case of Hiromasa. The Examiner maintains that the cited combination of references teach the claimed limitations.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL WALSH whose telephone number is (571)272-2409. The examiner can normally be reached on M-F 9am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL WALSH/
Primary Examiner, Art Unit 2887